DOCUMENT RESUME

ED 328 810 CG 023 116

AUTHOR Brennan, Patricia A.; And Others
TITLE Patterns of Behavior in Family Conflict: A Systems View.
PUB DATE Aug 90
NOTE 19p.; Paper presented at the Annual Convention of the American Psychological Association (98th, Boston, MA, August 10-14, 1990).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Behavior Patterns; *Conflict; Conflict Resolution; *Family Problems; *Family Relationship; *Interpersonal Communication; Parent Child Relationship
IDENTIFIERS *Family Systems Theory

ABSTRACT

Observations of conflictual family interaction have revealed that several distinctive behavior patterns tend to occur during the course of a family dispute. Patterns such as negative reciprocity, positive reciprocity, and coercion have been described and utilized as predictors of marital satisfaction and parent-child relations. This study examined the relationship between verbal family interaction patterns and reported child behavior problems. Subjects were 70 nonclinic families who participated in 10-minute videotaped family discussions as part of an extensive study of marital conflict. These discussions were encoded according to verbal content and classified on the basis of two systems view approaches--one a holistic descriptive method and the other a moment-to-moment analysis of the interaction over time. Classification according to the holistic approach yielded several distinct patterns of positive and negative family interactions. These patterns included: couple positive reciprocity, family positive reciprocity, one person highly positive, couple negative reciprocity, family negative reciprocity, one person highly negative, child coercion, and parent coercion. The moment-to-moment time analysis also tested for the presence of coercion. Child coercion was then examined in relation to parent reports of behavior problems on the Achenbach Child Behavior Checklist. Child coercion patterns detected by either the holistic or the moment-to-moment method of research were found to be significantly related to externalizing behaviors and aggressive behavior problems in children. (ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED328810

PATTERNS OF BEHAVIOR IN FAMILY CONFLICT: A SYSTEMS VIEW

Patricia A. Brennan
Richard S. John
Gayla Margolin
University of Southern California

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Patricia Brennan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the 98th Annual Convention of the American Psychological Association, Boston, MA, August 1990

CG023116

Abstract

This study examined the relationship between verbal family interaction patterns and reported child behavior problems. Videotaped family discussions were coded according to verbal content and classified on the basis of two systems view approaches--one a holistic descriptive method and the other a moment-to-moment analysis of the interaction over time. Classification according to the holistic approach yielded several distinct patterns of positive and negative family interactions. These patterns included: couple positive reciprocity, family positive reciprocity, one person highly positive, couple negative reciprocity, family negative reciprocity, one person highly negative, child coercion and parent coercion. The moment-to-moment time analysis also tested for the presence of coercion. Child coercion was then examined in relation to parent reports of behavior problems on the Achenbach Child Behavior Checklist. Both the holistic and the moment-to-moment child coercion patterns were found to be significantly related to externalizing behaviors and aggressive behavior problems in children.

Patterns of Behavior in Family Conflict: A Systems View

Observations of conflictual family interaction have revealed that several distinctive behavior patterns tend to occur during the course of a family dispute. Patterns such as negative reciprocity, positive reciprocity, and coercion have been described and utilized as predictors of marital satisfaction and parent-child relations. Most of these patterns, however, have been described by frequency counts of individual behaviors, which ignore the temporal and contingent aspects of the interaction. More advanced research in this area has utilized sequential analyses to describe these family processes. Such analyses can account for temporal order and contingent probabilities of behavior. In this study we will employ a time series method which accounts for these factors and also allows for the detection of dominance or control in the interaction. This method will be used to assess for distinct patterns in the moment-to-moment interactions of family members.

Unfortunately, the time series method that we will employ, as well as most sequential analysis methods, assume stationarity. Therefore this method cannot assess for or describe changes in the patterns of family interaction over time. Very few studies have described interaction processes over time which account for both temporal order and behavioral contingencies, and are not bound by stationarity. One such study (Gottman, Markman, & Notarius, 1977) examined conflictual discussions of couples and presented cumulative plots of their behaviors over time. Distinctive patterns of behavior were found for distressed and nondistressed couples. In the present study we will use a similar "holistic" method in order to examine and identify distinctive interaction patterns in family conflict. It is hypothesized that several distinct patterns will emerge in the examination of the cumulative plots of family behaviors over time.

One particular pattern of interaction that is of interest in a study of families and children is that of coercion. This pattern is thought to result from a feedback loop through which a child is reinforced for emitting negative behaviors, and thus continues to become more negative over time. Previous studies have found a significant relationship between coercive family processes and childhood aggression (Patterson, 1982). In this study we will both employ a holistic descriptive approach and a moment-to-moment time series analysis in the classification of families according to

the presence of coercion. We will then test the hypothesis that children from families which display a coercive pattern will display more externalizing and aggressive behavior problems.

Method

Subjects

Subjects in this study were 70 nonclinic families who participated in a ten minute videotaped family discussion as part of an extensive study of marital conflict. Subjects were recruited for this study through newspaper and radio advertisements. The overall research project examined behavioral, cognitive and affective variables as they contribute to marital conflict style and marital adjustment. The subjects were screened according to the following requirements for participation: a) spouses must be living in the same residence; b) couples must have at least one child between the ages of three and eighteen living at home; c) English must be the language spoken in the home; d) couples must not have been in marital or family therapy for more than two sessions; e) couples must be married for at least one year; f) couples must have a home telephone; and g) couples had to be available at times when sessions were scheduled.

The children in this sample included approximately equal numbers of boys and girls, aged three to eighteen with a mean age of 9.2. The number of children in each family ranged from one to five with a mean of 2.2.

Family Discussions

The discussion focused on a topic of conflict for the family, and was videotaped in a university laboratory. For the purposes of content coding, the discussion was transcribed from videotape and partitioned into thought units (approx. 400/discussion). Each thought unit was then coded according to the FAMISS content coding system (Margolin, 1980), which consists of 41 separate content codes. Examples of these codes include: Express Feelings-Positive, Problem Solve-Self, Disagree, and Blame. Utilizing values empirically derived in a previous study (Michelli, 1988), each content code was then translated into a numeric value (-10 to +10) which directly reflected its positive or negative quality. For example, a content code deemed highly positive, such as Express Feelings-Positive was assigned a high range positive value of +6.7

whereas a content code deemed moderately negative, such as Disagree was assigned a mid-range negative value of -3.4.

In order to plot the behaviors over time, the data were split by 15 second intervals. Positive numeric values of contents expressed in each time interval were added together in order to form an interval score for positive behaviors. Similarly, negative numeric values of contents expressed in each time interval were added together in order to form an interval score for negative behaviors. Each family member received two scores--one for negative behaviors and one for positive behaviors--for each of the 40 time intervals.

For purposes of the holistic method of classification, the interval scores were plotted cumulatively over time with positive and negative scores for each family member appearing on each family plot. For the purposes of the moment-to-moment time series method of classification, the interval scores were differenced to correct for nonstationarity.

Child Behavior Problems

Child behavior problems were measured by parent reports on the Achenbach Child Behavior Checklist (CBCL). Both mothers and fathers completed the CBCL and the mean of their scores was used for analysis. Scores for internalizing, externalizing, and aggressive behaviors were used in this study. A cut-off score of 60 was used, with those subjects scoring above 60 considered as displaying the problem behavior in question. In order to maintain independence in analysis, data from only one child's CBCL in each family was examined. The oldest child with CBCL data was chosen for inclusion. This child's family discussion data was also employed for the classification of families according to the presence of child coercion.

Results

Holistic Classification

Examination of the cumulative plots of positive and negative behaviors in the family discussion resulted in the identification of the following nine distinct interaction patterns: couple positive reciprocity (N=7), family positive reciprocity (N=9), one person highly positive (N=9), couple negative reciprocity (N=3), family negative reciprocity (N=4), one person highly negative

(N=3), balanced escalation (N=16), parent coercion (N=4), child coercion (N=13), and unscorable (N=2). Please see Figures 1 through 3 for pattern examples.

One of the nine identified interaction patterns, the child coercion pattern, was further examined in its relationship to reported child behavior problems. As can be seen in Figure 3, the child coercion pattern is exemplified by an increase in the parents' positive verbalizations corresponding to a child's increasing negative verbalizations. This pattern reflects the tendency for parents caught in a coercive process to reinforce their child for negative behaviors. As hypothesized, children from families displaying this coercive pattern are found to have more externalizing and aggressive behavior problems according to parent report (see Tables 1 and 2). A significant relationship was also found between the coercive pattern and internalizing behavior problems on the CBCL (see Table 3). Children from families that evidenced the child coercion pattern were found to be more likely than other children in the study to display internalizing behavior problems. Note that four of the 13 coercive families had to be dropped from these analyses due to a lack of CBCL data for the child involved in the coercive process. Analyses which included the four other coercive families yielded similar results.

In order to assess for potential confounds the following variables were tested for differences across coercive and non-coercive groups: parents level of marital distress, age of the child, gender of the child, and whether the parents were biological or step-parents of the child in question. Nonsignificant results were found for all of the above possible confounds.

Time Series Classification

Figure 4 presents a sample plot of the type of noncumulative data which was differenced for the purposes of the time series analysis. The Gottman-Williams BIVAR procedure (1982) was used to test the relationship between parents' positive and children's negative verbalizations in the family conflict discussion. Spectral analysis of the data suggested the presence of nonstationarity which was removed from the data through differencing of the data points.

Each of the parent's data was tested against the data of the oldest child in the family who had complete CBCL data. A coercive pattern was considered to exist if the child's negative

behavior led (or controlled) either of the parent's positive behavior to a significant degree. Only those patterns where an increase in a child's negative behavior led to an increase in a parent's positive behavior were considered coercive. Eleven families were found to display such a pattern.

Tables 1 through 3 present the results of the chi-square analyses comparing coercive patterns and child behavior problems. As hypothesized, children displaying coercive family patterns were significantly more likely to exhibit aggressive and externalizing behavior problems. There was no difference between the coercive and non-coercive groups in terms of internalizing behavior problems.

Chi-square analyses comparing coercive and non-coercive groups in terms of age, gender, parents' marital distress, and step vs. biological parentage resulted in nonsignificant findings with one exception. The coercive group was found to have significantly more males than the non-coercive group. In order to assure that this confound did not account for the relationship between the coercive patterns and the CBCL behaviors, gender itself was tested as a predictor of internalizing, externalizing, and aggressive behavior problems. Nonsignificant results were noted in these analyses.

Discussion

The results of this study suggest the utility of both the holistic approach and the moment-to-moment time series analyses as descriptors of coercive family processes. Families defined as coercive by each of these methods were found to have children who displayed increased amount of aggressive and externalizing behavior problems. This results are consistent with the findings of Patterson (1982).

There was little overlap in the families defined as coercive according to the two systems type approaches used in this study. Only one family was found to be coercive according to both of these methods. The time series method more closely resembles the definition of coercion put forth by Patterson (1982). He describes coercion as a moment-to-moment process of interaction, often occurring between a mother and her son which results in the outcome of child aggressive behavior. It is interesting to note that nine of the eleven families classified as coercive according to the time-

series method were classified as such because of the results of mother-son data. Significantly more boys were found in this coercive group than in the non-coercive families. And CBCL comparisons revealed a specific relationship between externalizing-aggressive behaviors and coercion defined by this moment-to-moment method.

The holistic method of defining coercion pinpoints a distinct group of children who display more internalizing as well as externalizing behavior problems. This method may be capturing a family process whose outcome is not specific to aggression, but is more globally detrimental to the children involved.

The methods used in this study are preliminary, and the creation of a full classification system for coercion and other family processes will require further research and replication. Our eventual goal is to specify the dynamic feedback structures evident in family interaction processes and to model them quantitatively. This study represents the first step toward this goal--graphical representation and identification of distinct patterns of family conflict over time using two methods based on a systems view of the data. The finding that one of these patterns--the coercive pattern--is significantly related to child behavior problems suggests the utility of these approaches from both a research and clinical standpoint.

References

Gottman, J., Markman, H., & Notarius, C. (1977). The topography of marital conflict: A sequential analysis of verbal and nonverbal behavior. Journal of Marriage and the Family, 39, 461-477.

Gottman, J. M., & Williams, E. A. (1982). A user's guide to the Gottman-Williams Time Series Analysis Computer Programs for Social Scientists. New York: Cambridge University Press.

Margolin, G. (1980). Family and Marital Interactional Scoring System. Unpublished manuscript. University of Southern California, Los Angeles.

Michelli, J. (1988). Observational Bias in Spouse Observation: Integrating Cognitive and Behavioral Approaches to Marital Distress. Unpublished doctoral dissertation, University of Southern California, Los Angeles.

Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia.

Table 1. Percentages of coercive pattern and non-coercive pattern subjects who exhibited aggressive behavior problems

	Percent with aggressive behavior problems	Chi-Square	N
Holistic view method			
Coercive	77.8%		9
Noncoercive	23.2%	8.43 **	56
Times series method			
Coercive	63.6%		11
Noncoercive	26.3%	4.29 *	57

* $p < .05$
** $p < .01$

Table 2. Percentages of coercive pattern and non-coercive pattern subjects who exhibited externalizing behavior problems

	Percent with externalizing behavior problems	Chi-Square	N
Holistic view method			
Coercive	55.6%		9
Noncoercive	15.8%	5.17 *	57
Times series method			
Coercive	54.5%		11
Noncoercive	17.2%	5.28 *	58

* $p < .05$

Table 3. Percentages of coercive pattern and non-coercive pattern subjects who exhibited internalizing behavior problems

	Percent with internalizing behavior problems	Chi-Square	N
Holistic view method			
Coercive	55.6%		9
Noncoercive	16.4%	4.85 *	55
Times series method			
Coercive	36.3%		11
Noncoercive	24.4%	0.67	56

* $p < .05$

Figure 1. Positive Reciprocity Pattern

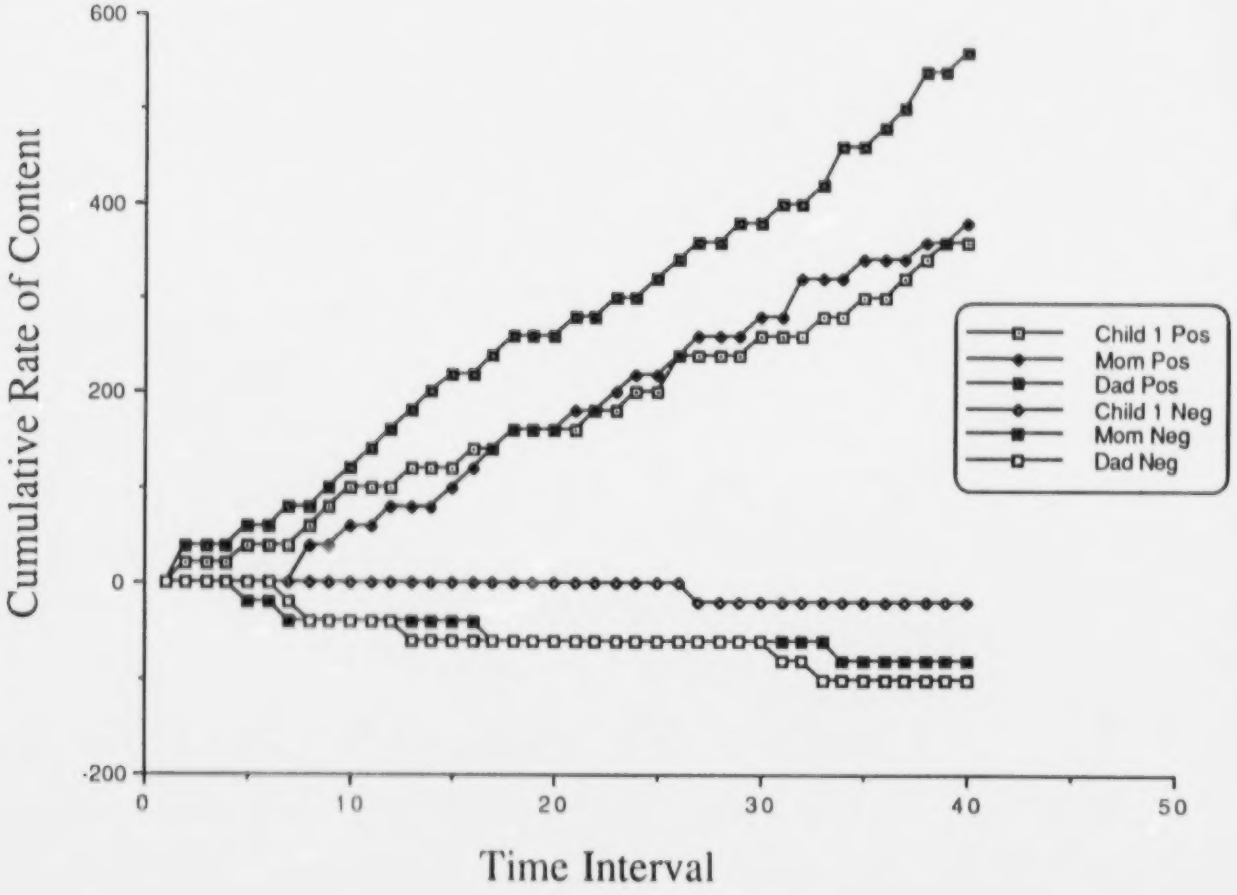


Figure 2. One Person Highly Negative

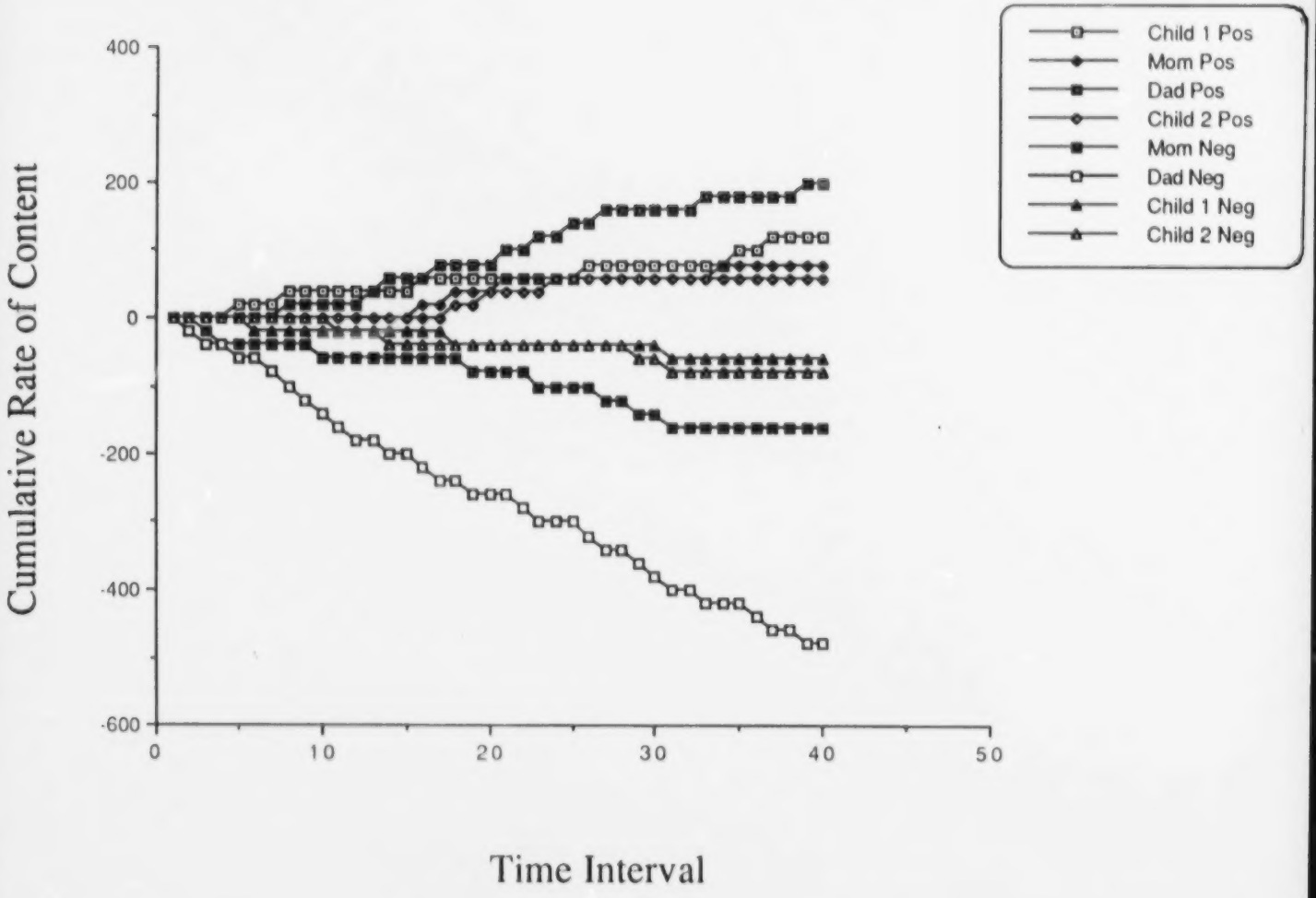


Figure 3. Child Coercion Pattern

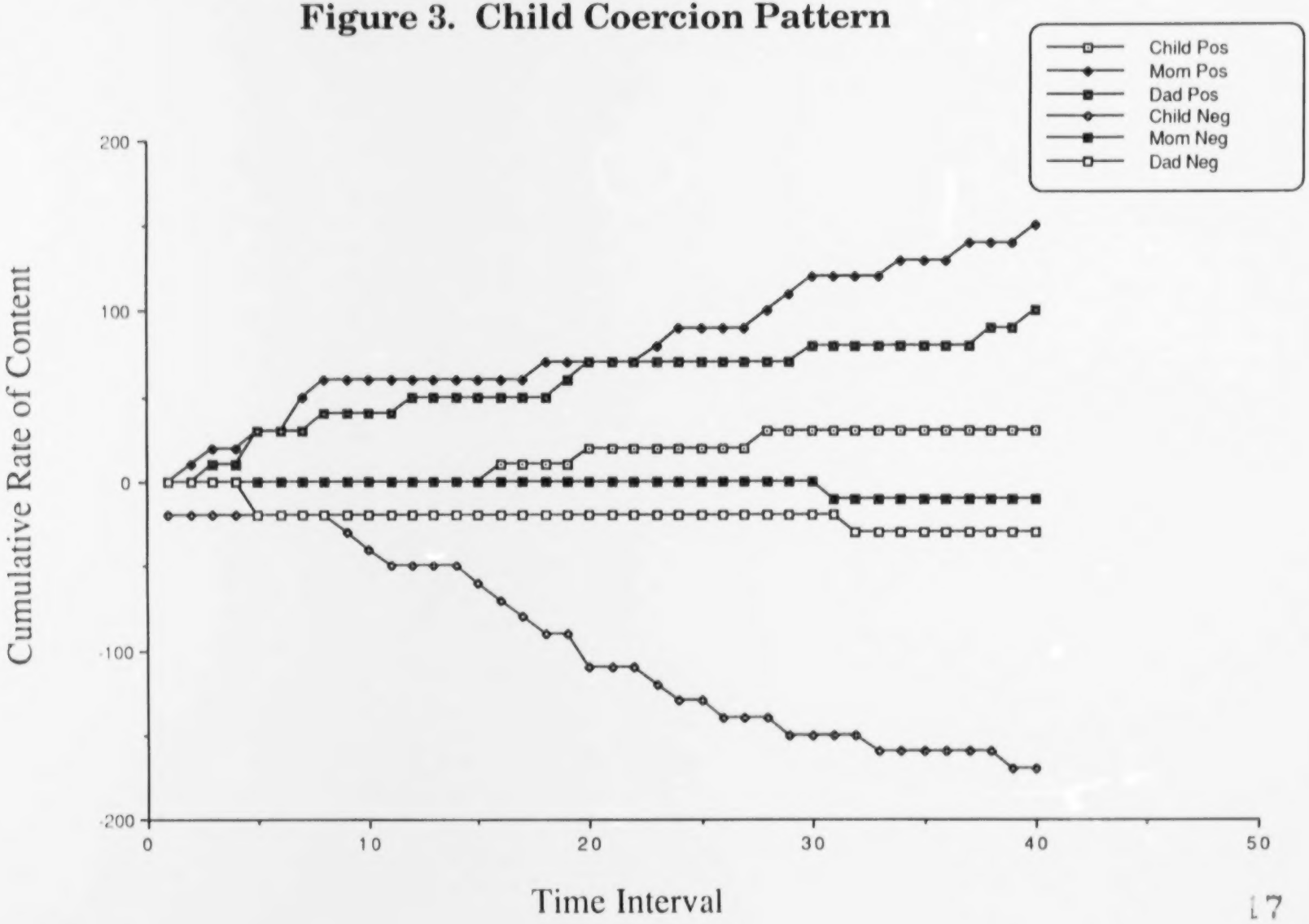
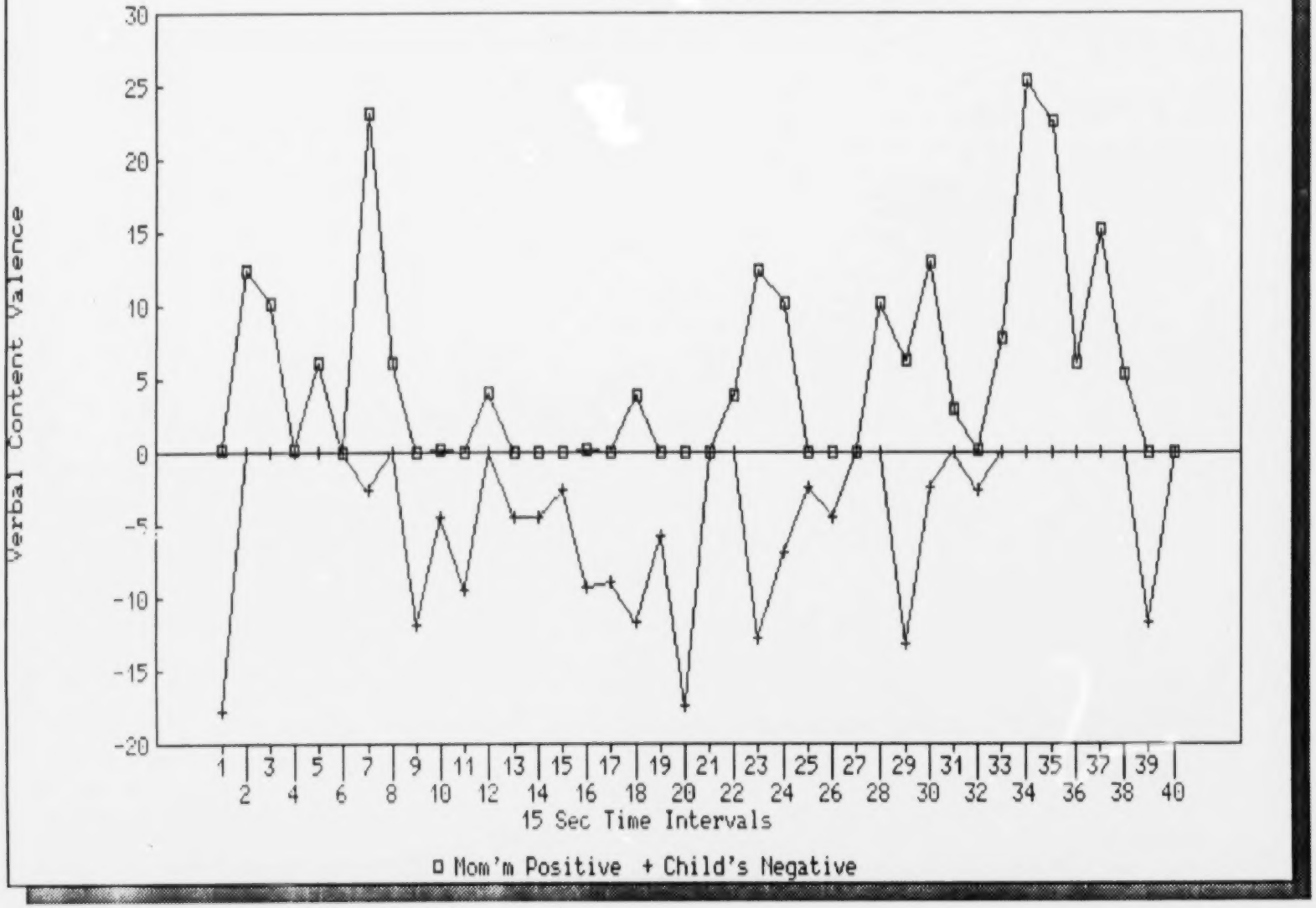


Figure 4

Family 121 --- Mom's Pos & Child's Neg



08 01 90 17:46:18